

## **REMARKS**

Claims 1-6 are pending in this application. The Office has rejected all claims under 35 USC 102(e) as anticipated by US Patent No. 6,473,616 to Sydor (hereinafter Sydor).

Sydor has an effective filing date for purposes of 35 USC 102(e) of May 5, 1999. The present application claims priority to U.S. Provisional Patent Application No. 60/093,360 filed July 20, 1998. That application is attached hereto as Exhibit A. The specification and claims of that provisional application are identical to the specification and claims as filed in the present patent application.

Accordingly, Sydor is not prior art to the present application under 35 USC 102(e) (or any other part of the statute). Accordingly, Applicant respectfully requests the Office to withdraw this rejection and issue a notice of Allowance at the earliest possible date.

Furthermore and in any event, Applicant notes that Sydor does not anticipate any claim of the present application. The present invention relates to an LMDS antenna array having multiple radiating antenna elements wherein the antenna elements are adjusted in phase and amplitude to achieve certain novel radiation patterns. Particularly, claims 1 and 4 recite that the antenna elements are adjusted in phase and amplitude to (1) mitigate radiation above the horizon; and (2) decrease attenuation in radiating power with distance from the antenna. Claims 2 and 5 depend from Claims 1 and 4, respectively, and further add that the antenna elements are adjusted in phase and amplitude to mitigate nulls between lobes of combined radiated signals. Finally, Claims 3 and 6 depend from Claims 1 and 4, respectively, and add that


the antenna elements are adjusted in phase and amplitude to reduce excess signal power at near range.

Sydor pertains to the azimuth interactions of a plurality of antennas, whereas the present application concerns optimizing the elevation radiation pattern of a single antenna. The two topics are inapposite. Sydor does mention that radiation in the elevation axis should be small to mitigate interference with satellites (which has nothing to do with the purpose of minimizing radiation above the horizon in the present invention). However, it does not contain any disclosure pertaining to attenuation as function of distance.

At a minimum, Sydor does not teach claim elements “the signal provided to each of the antenna elements being adjusted in phase and in amplitude to decrease attenuation in radiated power with distance from the antenna” (claim 1) and “adjusting the signal provided to each of the antenna elements in phase and in amplitude to decrease attenuation in radiated power with distance from the antenna” (claim 4). Despite the fact that the Office Action purports to reject independent claims 1 and 4 over Sydor, the Office Action does not even assert that Sydor teaches these features. The Office asserted with respect to claim 1 that Sydor teaches at col. 15, lines 1-36 “sidelobe levels referred to attenuation in radiated power with distance away from the antenna addressed”. This quote is somewhat cryptic and it is unclear if it is the result of a clerical error or is meant to address the above-noted features recited in claims 1 and 4. In either event, sidelobe levels is an entirely different issue than attenuation as a function of distance from the antenna. Applicant has reviewed this portion of Sydor and it does not pertain to decreasing attenuation as a function of distance from the antenna.

In view of the foregoing remarks, this application is now in condition for allowance. The Examiner is invited to contact Applicant's undersigned counsel by telephone call in order to further the prosecution of this case in any way.

Respectfully submitted,

A handwritten signature in cursive script, reading "Theodore Naccarella", written in dark ink.

Theodore Naccarella  
Registration No. 33,023  
Synnestvedt & Lechner LLP  
2600 Aramark Tower  
1101 Market Street  
Philadelphia, PA 19107  
Telephone: 215-923-4466  
Facsimile: 215-923-2189

Attorneys for Applicant